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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,463	11/06/2003	Toshiaki Hirata	566.37536CX1	8553

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EXAMINER

NGUYEN, THU HA T

ART UNIT PAPER NUMBER

2155

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,463

Applicant(s)

HIRATA ET AL.

Examiner

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-5 are presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bigus et al.** (hereinafter Bigus) U.S. Patent No. **5,442,730**, in view of **Lapourtre et al.** (hereinafter Lapourtre) U.S. Patent No. **5,136,708**.

5. As to claim 1, **Bigus** teaches the invention substantially as claimed, including a method of specifying a delay factor, for specifying a delay factor in processing jobs which are executed in a predetermined order by a computer system having a plurality of computers, wherein said method comprises:

a collecting step in which history information expressing history of execution of a job is collected from each computer assigned each of said jobs which are executed in a predetermined order (abstract, figure 8, col. 3 lines 38-55, col. 4 lines 54-67); and

a specifying step in which a job which became a delay factor in processing said jobs, and a part of the computer system, which undertakes transfer of said job which became the delay factor, are decided, in accordance with said history information and definition information expressing an execution schedule of each job assigned said computers (abstract, figures 1, 7-10, col. 38-55). **Bigus** does not explicitly teach plurality of computers. However, **Bigus** discloses the step of collecting history information and executing schedule of each job assigned to such as servers and other computer systems (col. 10, lines 48-61). Moreover, this feature is inherent with the system because in a client-server environment, multiple clients are connected to a server and are interchangeable. The client that has interconnections with the server can be substituted for another client or another computer in the network.

Bigus does not explicitly teach the feature of permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system.

Lapourtre teaches permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system (abstract, col. 3, lines 32-50, col. 10, lines 10-39 –*when one of the computer system fail, it is isolated from other computer systems and one of the other computer takes over the task*). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the feature as taught by **Lapourtre** into **Bigus** system because it would provide an efficient system to perform the task (i.e., job) by a specific function module in the system

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so that the resulting system is relatively insensitive to malfunctions and can readily be expanded (see Lapourtre col. 3, lines 20-27).

6. As to claim 2, **Bigus** teaches the invention substantially as claimed, wherein said history information is information that can specify an execution start time at which said each computer start execution of the job, an execution end time at which said computer ended the job, and an execution time required by said computer to execute the job (col. 2 lines 38-46); said definition information is information that can specify a planned start time being a planned time at which execution of each job is started, a planned end time being a planned time at which execution of each job is ended, and a planned execution time being a planned time required for execution of each job (col. 2 lines 59-col. 3 lines 7); and said specifying step comprises: a first step in which a computer assigned to a job whose execution time exceeds a planned execution time by more than a predetermined degree is extracted as a delay factor in processing said job net; and a second step in which, with respect to a job whose execution end time is latest among jobs executed just prior to a job whose execution start time is delayed from a planned start time by more than a predetermined degree, when said execution end time is not delayed from a planned end time by more than a predetermined degree, said pad of the computer system that undertakes transfer between said job whose execution start time is delayed from the planned start time by more than the predetermined degree and said job executed just prior to

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the job in question is extracted as a delay factor in processing said job (col. 3 lines 42-48).

7. As to claim 3, **Bigus** teaches the invention substantially as claimed, wherein said second step when a same computer is assigned to said job whose execution start time is delayed from the planned start time by more than the predetermined degree and to said job executed just prior to the job in question, said computer is extracted as the delay factor, and when different computers are respectively assigned to said job whose execution start time is delayed from the planned start time by more than the predetermined degree and to said job executed just prior to the job in question, a network between said computers is extracted as the delay factor (col. 3 lines 42-48). **Bigus** discloses that the delay cost function could be function of multiple variables. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to extract the job in question as the delay factor when processing in the same computer and to extract the network between computers as the delay factor when processing in different computers. It would have been obvious to use these delay factors as variables for the delay cost function because **Bigus** discloses that the function can be dependent on multiple variables.

As to claim 4, **Bigus** teaches the invention substantially as claimed, including a recording medium that stores therein a program to be read and executed by a computer, wherein said program is one for specifying a delay

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factor in processing a job net executed by a computer system having a plurality of computers (abstract, figure 8, col. 3 lines 38-55, col. 4 lines 54-67); and said program makes said computer execute: a collecting step in which history information is collected from each computer assigned each of a series of jobs which are executed in a predetermined order and constitute said job net to said computer, said history information expressing a history of executing a job which constitutes said job net and is assigned to said each computer; and a specifying step in which a job which became a delay factor in processing said job net, and a part of the computer system, which undertakes transfer of said job which became the delay factor, are decided, based on said history information and definition information expressing an execution schedule of each job assigned to said computers (abstract, figure 1, 7-10, col. 3 lines 38-55). **Bigus** does not explicitly teach plurality of computers. However, **Bigus** discloses the step of collecting history information and executing schedule of each job assigned to such as servers and other computer systems (col. 10, lines 48-61). Moreover, this feature is inherent with the system because in a client-server environment, multiple clients are connected to a server and are interchangeable. The client that has interconnections with the server can be substituted for another client or another computer in the network.

Bigus does not explicitly teach the feature of permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system.

Lapourtre teaches permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system (abstract, col. 3, lines 32-50, col. 10, lines 10-39 –*when one of the computer system fail, it is isolated from other computer systems and one of the other computer takes over the task*). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the feature as taught by **Lapourtre** into **Bigus** system because it would provide an efficient system to perform the task (i.e., job) by a specific function module in the system so that the resulting system is relatively insensitive to malfunctions and can readily be expanded (see Lapourtre col. 3, lines 20-27).

As to claim 5, **Bigus** teaches the invention substantially as claimed, including a management unit for specifying a delay factor in processing jobs which are executed in a predetermined order by a computer system having a plurality of computers; wherein said management unit comprises: means for collecting history information from each computer assigned to each of said jobs, said history information expressing a history of executing a job which is assigned to said each computer (abstract, figures 1, 8, col. 3 lines 38-55, col. 4 lines 41-67); and means for deciding a job, which became a delay factor in processing said jobs , and a part of the computer system which, undertakes transfer of said job which became the delay factor, based on said history information and definition information expressing an execution schedule of each job assigned to said computers (abstract, figure 1, 7-10, col. 3 lines 38-55). **Bigus** does not

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explicitly teach plurality of computers. However, **Bigus** discloses the step of collecting history information and executing schedule of each job assigned to such as servers and other computer systems (col. 10, lines 48-61). Moreover, this feature is inherent with the system because in a client-server environment, multiple clients are connected to a server and are interchangeable. The client that has interconnections with the server can be substituted for another client or another computer in the network.

Bigus does not explicitly teach the feature of permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system.

Lapourtre teaches permitting an analysis of said delay factor to be performed in said part of the computer system exclusive of other parts of the computer system (abstract, col. 3, lines 32-50, col. 10, lines 10-39 –*when one of the computer system fail, it is isolated from other computer systems and one of the other computer takes over the task*). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the feature as taught by **Lapourtre** into **Bigus** system because it would provide an efficient system to perform the task (i.e., job) by a specific function module in the system so that the resulting system is relatively insensitive to malfunctions and can readily be expanded (see Lapourtre col. 3, lines 20-27).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (571) 272-3989. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Najjar Saleh, can be reached at (571) 272-4006.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.


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The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thu Ha Nguyen

June 21, 2005



SALEH NAJJAR
PRIMARY EXAMINER